(Feasibility of Reintroduction of Anadromous Fish Above or Within the Hells Canyon Complex)

# Existing Habitat Conditions of Tributaries Formerly Used by Anadromous Fish (E. 3.1-2, Chapter 4)

John W. Anderson AFS Certified Fisheries Scientist Cold Stream Consulting, P.O. Box 575 Baker City, OR 97814 Contracted by the

# Oregon and Idaho Bureau of Land Management

November 4, 2002

#### I. Introduction

This chapter summarizes information about the tributary basins formerly used by anadromous fish upstream of Hells Canyon Complex. The information summarizes findings concerning the distribution of anadromous fish, as well as past and present land uses that have influenced existing habitat conditions in those basins. The tributary basins include Pine Creek, Powder River, Malheur River, Owyhee River, Bruneau River, Salmon Falls Creek, Rock Creek Basins (Rock Creek Basins include all tributaries that drain directly into the Snake River), Malad River, Boise River, Payette River, Weiser River, Lower Snake River Tributaries, Wildhorse River, and Indian Creek.

#### II. Conclusion

IPC does not provide conclusions in this study. The study provides facts that lead the reader to draw their own conclusions.

1. [The tributaries of the Snake River above HCC are portrayed as generally uninhabitable by salmonids in much of their former range due to a myriad of changes in the habitat. Many accounts of stream degradation are quoted to emphasize this point.

Access to most of the former habitat is blocked by irrigation and hydroelectric dams. Irrigation diversions have removed much of the water from the streams for irrigation. Activities such as grazing, channelization, timber harvest, and mining have all caused stream temperatures to increase to the point that many streams will not support salmonids during summer months. Croplands in the Snake River Basin are a major source of sediment and chemical pollution that cause most of the former habitat to be nearly useless for rearing and spawning anadromous fish. Only a few tributaries are still available that have reasonably good habitat. The lack of access to and poor quality habitat in the tributaries nearly eliminates the possibility for potential introduction of summer steelhead and spring/summer chinook salmon. The sources of the information used to describe the habitat condition include USFS and BLM documents as well as historic records.] [This text is paraphrased] (Pages 3-85)

## Response:

The BLM agrees that most of the tributaries are blocked to summer steelhead and spring/summer chinook salmon. However, the quality of the habitat and how long it may take to recover, if ever, is subject to interpretation. The applicant's interpretation is a worst-case scenario. A discussion of this information by the Tribes, and state and federal agencies should occur before these conclusions are accepted a fully accurate.

## III. Study Adequacy

The BLM believes the study to be adequate with some reservations. The study appears to have selected specific sections of reports that document the observations of adverse impacts. Generally the information is extensive but it leaves a doubt as to whether the report is truly accurate, providing a completely representative picture of the habitat. There is considerable disagreement among biologists regarding habitat quality rating. Due to the complexity of categorizing habitat, there has never been a system devised to rate habitat quality that has received unilateral agreement from the fisheries community. The applicant has constructed a report by selecting documents written by biologists who have observed negative habitat conditions. It is doubtful whether any of the reports were peer reviewed. Many of the reports, if they were accurate, may be out of date, and the conditions may have improved. Many of these same streams have healthy resident redband trout populations which have many of the same habitat requirements as the anadromous fish in question.

### IV. BLM Conclusions and Recommendations

#### Conclusions

The study is carefully crafted to document anadromous fish habitat limitations. The findings are a synthesis of many reports in which negative aspects of the habitat have been reported. The many accounts of degraded habitat are heavily emphasized; when in fact, they may only represent numerous localized problems.

The point is made that the large number of irrigation withdrawals and dams existing within the system will be very difficult to correct. The data was generated from Oregon and Idaho water resources information. This information may not be accurate. Discussions in the aquatic resources work group indicated that much of this information is outdated. The study implies that it would require an enormous effort to improve tributary habitat to the quality needed by anadromous fish. The report indicates that detrimental land use practices are widespread and there will have to be a tremendous improvement in management practices in order to recover the habitat. The study fails to acknowledge any improvement in environmental laws, law enforcement, and land management practices.

#### Recommendations

The BLM should accept this study with the knowledge that, although the facts are generally correct, there is a strong negative bias against the possibility that the habitat will ever be restored for anadromous and resident coldwater fish species. The habitat

conditions should be acknowledged to be generally less than optimum, but the BLM should not agree that they are as dire as the Applicant depicts. The BLM needs to discuss this information with other agencies before accepting all of the information as correct. Most of the watersheds are undergoing a TMDL process designed to improve water quality. Many watersheds are being influenced by ESA and other best-management-practices guidelines. These newer regulations and guidelines need to be considered when looking at the habitat in the long-term. Additionally, if PM&E measures require the applicant to contribute to habitat restoration, some of the problems they enumerate could be solved.